



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,039	09/27/2005	Masahiro Fujita	09812.0514	4647
22852	7590	03/15/2011		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER EDWARDS, JERRAH	
			ART UNIT	PAPER NUMBER
			3664	
			MAIL DATE	DELIVERY MODE
			03/15/2011 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/551,039

**Applicant(s)**

FUJITA ET AL.

**Examiner**

JERRAH EDWARDS

**Art Unit**

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-942)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is responsive to communications filed on September 28, 2010.

Claims 1-24 are canceled and claims 25-48 are pending.

#### ***Allowable Subject Matter***

1. The indicated allowability of claims 31 and 39 is withdrawn in view of the newly discovered reference(s) to Vaughan (US 2003/0192040), Kasuga (US 6,577,924) and Sano (US 2003/0191389). Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan (US 2003/0192040) in view of Kasuga (US 6,577,924) and in further view of Sano (US 2003/0191389).

4. **Regarding claim 25**, Vaughn discloses an information providing apparatus for supplying data to electronic target device over a network. While Vaughn does not explicitly state that the target device is a robot apparatus, Vaughn teaches that the target device may be an electronic device that utilizes software stored on a memory media and implemented by a processing device. Kasuga discloses a robot that

includes a [processing device/controller 10] (Fig. 13), utilizes software (see section (4-2) Software Configuration of the Control Program beginning on col. 12, line 39) stored on a memory 10A (Fig. 13), and is connectable to a server (Fig. 3) which supplies motion data, or an application program to the robot apparatus (col. 8, lines 15-63; the server 38 prepares a character corrective vaccine including parameter data or software program, which determines the behavior/motion of the robot). Kasuga teaches that these features allow the system to send information from a server to the robot/user via a telecommunication line (Abstract). It would have been obvious for one of ordinary skill in the art at the time of the invention to use a computerized robot as the target device of the system disclosed by Vaughn in order to send information from a server to the robot/user via a telecommunication line.

Vaughn further discloses:

a content storage unit for storing at least one of data to be supplied to the [robot apparatus/target device] and programs to be supplied to the [robot apparatus/target device] (Fig. 2, software storage component 240);

a first receiver for receiving an inquiry comprising a service request, and information of the [robot apparatus/target device] from the [robot apparatus/target device] (Fig. 2, response component 230; see [0027], target device communicates with response component 230 via signals 2 and 3);

a preparer for preparing a list of data or programs based on services requested in the service request and the information of the [robot apparatus/target

device] and for returning the list to the [robot apparatus/target device] (see [0022] the system selects compatible software returns a recommendation);

a second receiver for receiving a selection of data or programs from the list from the [robot apparatus/target device] (Fig. 2, software storage component 240; see [0028], target device communicates with software storage component 240 via signals 4 and 5) wherein the data or programs are implicitly selected by the robot apparatus to comply with a requested service in the service request ([0027], software request generation component 280 confirms the selected software is compatible with target device 210 and forwards the information on to software loading component 290);

and a transmitter (Fig. 2, software storage component 240) for transmitting data or programs selected to comply with a requested service in the service request to the [robot apparatus/target device] (see [0028], software loading component 290 engages in a communication protocol (e.g., ftp, http, etc.) in which software corresponding to the software inquiry is retrieved).

Vaughn implicitly discloses that the selected data or software is selected by the [robot apparatus/target device] as described above, and in addition, Sano discloses a method of providing function to a mobile target device (Fig. 8, diagnostic device 52) over a network (Fig. 8, ASP 23), where the network sends available functions/programs to the target device. Sano explicitly discloses that the target device itself selects the appropriate program to be transmitted (see [0051] "program

files, the setting information, and the protocols, to be used can be determined on the ultrasonic diagnostic device based on the disease or environment information, and the determined program files, setting information and protocols may be read from the ASP 23" (emphasis added)). Sano teaches that this capability allows the user to use the device smoothly without any trouble in selection of the necessary programs (see [0051]); in other words, the device may be made more user-friendly. It would have been obvious for one of ordinary skill in the art at the time of the invention to use these features of Sano with the system of Vaughn in order to make the device more user-friendly.

5. **Regarding claim 26**, Vaughn implicitly discloses that the information providing apparatus is capable of communicating with the [robot apparatus/target device] in accordance with a Simple Object Access Protocol (SOAP). Vaughn teaches that communications may be transmitted using extensible markup language (XML) (see [0023]), as well as "ftp, http, etc.," (see [0036]). It was notoriously well known in the art at the time of the invention that SOAP combines well known standards, namely, XML and HTTP. This is admitted in Applicants' specification on page 5, (which states, "The SOAP (Simple Object Access Protocol) is a protocol for invoking data or services on other systems, formed on the basis of the XML (rendered Markup Language) or HTTP (Hyper Text Transfer Protocol)"). The Senn reference (US 2004/0002790), cited in previous Office Actions, may be relied on to show that SOAP was in public use by 2002 (see [0043], "existing distributed *[sic]* system

protocols (such as Simple Object Access Protocol (SOAP) or Remote Method Invocation (RMI) can be used between components so that they do not have to run on the same processor, but can pass results and status to each other via a network connection.”). It would have been obvious for one of ordinary skill in the art at the time of the invention to utilize SOAP as the communication protocol in the system disclosed by Vaughn, because Vaughn implicitly discloses the use of SOAP through its teachings regarding the use of existing and publicly available standards including HTTP/XML.

6. **Regarding claim 27**, Vaughn further discloses supervising supplementary information pertinent to the data or programs stored in the content storage unit (see [0032], a [device profile/supplementary information] is forwarded for utilization in the software selection process);

and a matching unit for matching the inquiry and the supplementary information (information received in response to the software inquiry is parsed by software loading component 290 and the location of "matching" software is extracted).

Vaughn does not explicitly state that the supplementary information is stored in database, however Sano discloses that the ASP 23 stores supplementary information pertinent to the data or programs stored in the content storage unit (see [0051], and that the [setting information and protocols/supplementary information], to be used may be read from the ASP 23 (the network server). It would have been

obvious for one of ordinary skill in the art at the time of the invention to use these features of Sano with the system of Vaughn in order to make the device more user-friendly.

7. **Regarding claim 28**, Vaughn further discloses a returning unit for returning, in response to the selection from the list, an access method for accessing the selected data or programs to the [robot apparatus/target device] (see [0028], software loading component 290 engages in a communication protocol (e.g., ftp, http, etc.) in which software corresponding to the software inquiry is retrieved) and that the transmitter transmits the selected data or programs, in response to an access request, corresponding to the accessing method, from the [robot apparatus/target device] (Figs. 3 and 4).

8. **Regarding claim 29**, Vaughn further discloses that the supplementary information comprises information pertinent to services and the information pertinent to information of the [robot apparatus/target device] (see [0026], target profile production component 270 produces a profile of a target system summarizing component characteristics and forwards the profile information to software request component 280).

9. **Regarding claim 30**, Vaughn further discloses information including at least one of:



an ID of the [robot apparatus/target device], wherein the ID is unique to the [robot apparatus/target device] (see [0030], a device identifies itself in one embodiment by providing its device identification (ID) to the network);

a robot sort ID, wherein the sort ID is unique to a type of the [robot apparatus/target device] (*Id.*);

a list of functions of the [robot apparatus/target device] (see [0026], the profile includes information indicating components included in target device 210 (e.g., hardware, software and operating systems included in the target system);

information indicating hardware architecture of the [robot apparatus/target device] (*Id.*); and

a database list owned by the [robot apparatus/target device] (*Id.*).

10. **Regarding claim 31**, this claim essentially recites all of the features of dependent claim 32 in independent form by incorporating the features recited in independent claim 25. Therefore, please see the explanation provided herein regarding claims 25 and 32.

11. **Regarding claim 32**, Vaughn further discloses that the information of the [robot apparatus/target device] includes a list of functions of the [robot apparatus/target device] (see [0026], the profile includes information indicating components included in target device 210 (e.g., hardware, software and operating systems included in the target system). Vaughn does not explicitly discuss the following features of this claim, however Kasuga further discloses that the [information providing apparatus/server] includes:

an object storage unit for storage of functional objects utilized by the [robot apparatus/target device] (col. 8, lines 34-52, the server 38 collects, from the robot, internal-state information including the states of emotion and instinct objects);

a specifying unit for specifying needed functions for the [robot apparatus/target device] to render the services requested (col. 8, lines 34-52, the server 38 generates or prepares information to correct the robot to the user's desires);

a comparing unit for comparing the needed functions to the list of functions to determine functions in deficit in the [robot apparatus/target device] among the needed functions (col. 8, lines 34-52, the difference between a character the user 200 desires and a current character of his robot is compared and the difference is determined); and

a retriever for retrieving one or more objects of functional objects corresponding to the functions in deficit, from the object storage unit, wherein the transmitter transmits the objects, along with the selected data or programs, to the [robot apparatus/target device] (col. 8, lines 54-56, the server 38 sends the character corrective vaccine to the robot, where the vaccine includes parameter data or software programs, as stated in col. 8, lines 22-27).

It would have been obvious for one of ordinary skill in the art at the time of the invention to use these features disclosed by Kasuga with the system disclosed by

Vaughn, in order to send information from a server to the [robot apparatus/target device] user via a telecommunication line.

12. **Regarding claim 33**, this claim recites a method including a preamble and five elements that mirror the functional language (language following the word “for”) recited in the preamble and the five elements listed in claim 25. Therefore, please see the above explanation regarding claim 25.

In addition, claim 33 recites that the inquiry comprising a service request is prepared via interaction between the robot apparatus and a user. Vaughn further discloses that its system is flexible and “provisions are also made to include indications of user desired objectives (e.g., special functionality) in the [inquiry/request],” by providing the user with convenient suggestion prompts and easily understood explanations (see [0015]). Therefore, the system of Vaughn may be implemented such that the [inquiry/request] is prepared via interaction between the [robot apparatus/target device] and a user.

13. **Regarding claim 34**, please see the above explanation regarding claim 26.

14. **Regarding claim 35**, please see the above explanation regarding claim 27 and note that Vaughn further discloses that the formulating of the list of the data or programs is based on the matching of the inquiry and the supplementary information (see [0015], an automated analysis of the target device discovers what components are included in the target system and based upon the results of the [analysis/supplementary information], an [inquiry/request] for software that is compatible with

the target device is developed, which includes indications of desired software parameters and attributes).

15. **Regarding claim 36**, please see the above explanation regarding claim 28.
16. **Regarding claim 37**, please see the above explanation regarding claim 29.
17. **Regarding claim 38**, please see the above explanation regarding claim 30.
18. **Regarding claim 39**, this claim essentially recites all of the features of dependent claim 40 in independent form by incorporating the features recited in independent claim 33. Therefore, please see the explanation provided herein regarding claims 33 and 40.
19. **Regarding claim 40**, Vaughn further discloses that the information of the [robot apparatus/target device] includes a list of functions of the [robot apparatus/target device] (see [0026], the profile includes information indicating components included in target device 210 (e.g., hardware, software and operating systems included in the target system). Vaughn does not explicitly discuss the following features of this claim, however Kasuga further discloses:
  - specifying needed functions for the [robot apparatus/target device] to render the services requested (col. 8, lines 34-52, the server 38 generates or prepares information to correct the robot to the user's desires);
  - comparing the needed functions to the list of functions to determine functions in deficit in the [robot apparatus/target device] among the needed functions (col. 8, lines 34-52, the difference between a character the user 200 desires and a current character of his robot is compared and the difference is determined); and

retrieving one or more objects of functional objects corresponding to the functions in deficit, from the object storage unit, wherein the transmitter transmits the objects, along with the selected data or programs, to the [robot apparatus/target device] (col. 8, lines 54-56, the server 38 sends the character corrective vaccine to the robot, where the vaccine includes parameter data or software programs, as stated in col. 8, lines 22-27).

It would have been obvious for one of ordinary skill in the art at the time of the invention to use these features disclosed by Kasuga with the system disclosed by Vaughn, in order to send information from a server to the [robot apparatus/target device] user via a telecommunication line.

- 20. **Regarding claim 41**, please see the above explanation regarding claim 25.
- 21. **Regarding claim 42**, please see the above explanation regarding claim 26.
- 22. **Regarding claim 43**, please see the above explanation regarding claim 27.
- 23. **Regarding claim 44**, please see the above explanation regarding claim 28.
- 24. **Regarding claim 45**, please see the above explanation regarding claim 29.
- 25. **Regarding claim 46**, please see the above explanation regarding claim 30.
- 26. **Regarding claim 47**, please see the above explanation regarding claim 32.
- 27. **Regarding claim 48**, please see the above explanation regarding claim 32.

***Response to Arguments***

28. Applicant's arguments with respect to the claims presented in the After Final Amendment filed September 28, 2010 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nomura (US 2002/0002630) discloses a method and system for supplying programs to devices over a network and Koskimies (US 2004/0009777) discloses a method and an arrangement for upgrading target devices, including toy robots. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRAH EDWARDS whose telephone number is 571-270-3044. The examiner can normally be reached on Monday through Friday, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. E./  
Examiner, Art Unit 3664  
/KHOI TRAN/  
Supervisory Patent Examiner, Art Unit 3664